UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/526,579	03/16/2000	Bruce L. Lieberman	14531.54.1	1721

22913 7590 06/30/2004

WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	**PAPER NUMBER**
2611	7

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/526,579	LIEBERMAN ET AL.	
	Examiner	Art Unit	
	Dominic D Saltarelli	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims, 1-3, 8, 20-22, 25, 26, 31-34, and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (5,630,061) [Richter] in view of Ducey (Multimedia Broadcasting and the Internet).

Regarding claim 1, Richter discloses a system having ports for receiving data (fig. 4, ANDIS MAC drivers 50 and 66), a method for accessing the data by applications (fig. 4, Applications 58), the method comprising the steps of:

Collecting, by miniport (as miniports are simply drivers which interface with an NDIS layer, represented here by NDIS Protocol Manager 56, and ANDIS-NDIS layer, and the ARCCI 68, in fig. 4), the data from the ports (col. 4, lines 20-23);

Transferring the data to a common application interface (fig. 4, software layer comprising 54, 60, 62, 63, 64, and 65, col. 5 line 66 – col. 6 line 22);

Presenting, by the common application interface, the data to the applications (col. 5, lines 4-8).

Richter fails to disclose the ports are video ports receiving television broadcasts with broadcast data.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter to include video ports for receiving broadcast television with broadcast data, as taught by Ducey, for the benefit of providing richer and more involving content to the user of the system.

Regarding claim 2, Richter and Ducey disclose the method of claim 1, and further disclose registering the video ports with the miniport (Richter, col. 4, lines 55-60).

Regarding claim 3, Richter and Ducey disclose the method of claim 1, and further disclose receiving a request (wherein the user of applications begins the process, Richter, col. 19, lines 54-59) for broadcast data.

Regarding claim 8, Richter and Ducey disclose the method of claim 1, and further disclose the common application interface is a RawData interface (as the MAC Mode has a state for delivering raw or unformatted data, Richter, col. 7,

lines 36-44, and as such, the application interface receiving data from the MAC driver would be a source of raw, unformatted data, col. 8, lines 65 – col. 9 line 2).

Regarding claim 20, Richter discloses a system having one or more broadcast data sources capable of receiving broadcast data (fig. 4, MAC layer 50 and 66), a method for collecting the broadcast data from the broadcast data sources, the method comprising the steps of:

Providing a miniport (as miniports are simply drivers which interface with an NDIS layer, represented here by NDIS Protocol Manager 56, ANDIS-NDIS layer, and the ARCCI 68, in fig. 4) for each broadcast data source (col. 4, lines 38-60), wherein each broadcast data source is capable of registering with the miniport (each MAC must register with the Protocol Manager, col. 4, lines 55-60);

Receiving a request from an application at the miniport for broadcast data from the broadcast data source (applications provide the requests to use the network connections, which are broadcast data sources, col. 5, lines 4-8, col. 6, lines 4-9 and col. 19, lines 54-65); and

Collecting the requested broadcast data at the miniport from the broadcast data source (this is the basic functionality of the disclosed system, wherein the miniport further provides the data to the common application interface for access by applications).

Richter fails to disclose receiving television broadcasts with broadcast data.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter to include receiving broadcast television with broadcast data, as taught by Ducey, for the benefit of providing richer and more involving content to the user of the system.

Regarding claim 21, Richter and Ducey disclose the method of claim 20, and further disclose registering the broadcast data source with the miniport (Richter, col. 4, lines 55-60).

Regarding claim 22, Richter and Ducey disclose the method of claim 20, and further disclose requesting (wherein the user of applications begins the process, Richter, col. 19, lines 54-59) broadcast data from a broadcast data source.

Regarding claim 25, Richter and Ducey disclose the method of claim 20, and further disclose delivering the requested broadcast data to NDIS (clearly shown in fig. 4).

Regarding claim 26, Richter and Ducey disclose the method of claim 20, and further disclose the requested broadcast data is delivered to a RawData interface (as the MAC Mode has a state for delivering raw or unformatted data, Richter, col. 7, lines 36-44, and as such, the application interface receiving data from the MAC driver would be a source of raw, unformatted data, col. 8, lines 65 – col. 9 line 2).

Regarding claim 31, Richter discloses a system capable of receiving broadcast data, a method for collecting broadcast data from broadcast data sources (the broadcast receiving sources are the hardware layer in fig. 4), the method comprising the steps of:

Calling, by the broadcast data source (MAC drivers are identified by the port, or channel, they represent, col. 8, lines 34-39), a function of a broadcast data source interface having parameters (the primitives are function calls for specific data and parameter setting, col. 8, lines 6-18), wherein the broadcast data source interface (the MAC drivers 50 and 66, fig. 4) permits broadcast data sources to interface with broadcast data source miniports (as miniports are simply drivers which interface with an NDIS layer, represented here by NDIS Protocol Manager 56, and ANDIS-NDIS layer, and the ARCCI 68, in fig. 4); and

Executing the function by the broadcast data source interface (for example, calling the Register_PCM function assigns a MAC port to the PCM, col. 8, lines 34-44).

Richter fails to disclose receiving television broadcasts with broadcast data.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter to include receiving broadcast television with broadcast data, as taught by Ducey, for the benefit of providing richer and more involving content to the user of the system.

Regarding claim 32, Richter and Ducey disclose the method of claim 31, and further disclose the function comprises Register and the parameter comprises VideoPort (the Register_PCM function assigns a MAC port, which handles broadcast data from incoming television broadcasts making it a video port, as taught by Ducey, to the PCM, col. 8, lines 34-44).

Regarding claim 33, Richter and Ducey disclose the method of claim 31, and further disclose the function comprises DeRegister [Release_PCM] and the parameter comprises SourcingHandle [Port_ID] (col. 8, lines 48-57).

Regarding claim 34, Richter and Ducey disclose the method of claim 31, and further disclose the function comprises Indicate [Retrieve_PPI_Status] and the parameter comprises Indication [returns PPI status] (col. 9, lines 7-19).

Regarding claim 39, Richter discloses a system capable of receiving broadcast data (from LAN 46 and WAN in fig. 4), a method for providing the broadcast data to applications (fig 4, applications 58), the method comprising the steps of:

Calling, by the applications, a function having parameters of a RawData interface (same function calls and parameters as with the disclosed NDIS extensions, but with a another module wherein the data is passed unformatted, col. 8 line 65 – col. 9 line 6), wherein the RawData interface permits the applications to interface with a RawData module (col. 8, lines 65-67); and

Executing the function by the RawData interface (an inherent feature, because when a function is called, that function is executed).

Richter fails to disclose receiving television broadcasts with broadcast data.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter to include receiving broadcast television with broadcast data, as taught by Ducey, for the benefit of providing richer and more involving content to the user of the system.

Regarding claim 40, Richter and Ducey disclose the method of claim 39, and further disclose the function comprises SelectRawData [Register_Null_DLC] and the parameter comprises VideoPort [Port_ID] (wherein the function establishes a connection for unformatted data through a specific port [which handles broadcast data from incoming television broadcasts making it a video port, as taught by Ducey] Richter, col. 10, lines 31-37).

Regarding claim 41, Richter and Ducey disclose the method of claim 39, and further disclose the function comprises SelectRawData [Register_Null_DLC] and the parameter comprises RawDataHandle [Port_ID] (col. 10, lines 31-48).

Regarding claim 42, Richter discloses a computer program product for implementing, in a system capable of receiving broadcast data (from LAN 46 and WAN in fig. 4), a method for collecting the broadcast data from broadcast data sources (hardware layer in fig. 4), the computer program product comprising:

A computer readable medium (fig. 2, RAM 24) carrying computer executable instructions for implementing the method (col. 3, lines 43-53), wherein the computer executable instructions comprise program code means for:

Calling, by a broadcast data source (MAC addresses), a function of a broadcast data source interface (MAC drivers, fig. 4), the function having parameters (col. 8, lines 7-26), wherein the broadcast data source interfaces the broadcast data sources with broadcast data source miniports (as miniports are simply drivers which interface with an NDIS layer, represented here by NDIS Protocol Manager 56, and ANDIS-NDIS layer, and the ARCCI 68, in fig. 4).

Richter fails to disclose receiving television broadcasts with broadcast data.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the computer program product disclosed by Richter to include

receiving broadcast television with broadcast data, as taught by Ducey, for the benefit of providing richer and more involving content to the user of the system.

Regarding claim 43, Richter and Ducey disclose the computer program product of claim 42, and further disclose the function comprises register [Register_PCM] and the parameter comprises VideoPort [Port_ID] (wherein the data port receives broadcast data from a television broadcast [making it a video port, as taught by Ducey] col. 8, lines 34-47).

Regarding claim 44, Richter and Ducey disclose the computer program product of claim 42, and further disclose the function comprises deregister [Release_PCM] and the parameter comprises SourcingHandle [Port_ID] (col. 8, lines 48-57).

Regarding claim 45, Richter and Ducey disclose the computer program product of claim 42, and further disclose the function comprises indicate [Retrieve_PPI_Status] and the parameter comprises Indication [PPI_Status_Pointer] (wherein the function call returns the status of the port interface to the place indicated by the status pointer, col. 9, lines 7-20).

3. Claims 4-6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter and Ducey as applied to claims 1 and 20 above, and further in view of Jones et al. (6,216,173) [Jones].

Regarding claim 4, Richter and Ducey disclose the method of claim 1, but fail to disclose separating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol.

In an analogous art, Jones teaches receiving data from multiple networks for use by multiple applications (col. 40, lines 52-67 and col. 41, lines 33-43), wherein data is intelligently converted as necessary (col. 40, lines 64-67), so when data which conforms to the protocol required by the network or application is received, no conversion takes place, but when the data does not conform to the necessary protocol, then the data is converted. This naturally means that received data is separated into objects or streams which comply with the necessary protocol from data which does not. This would allow users to receive a broad range services to be provided to users of many types of applications and devices (col. 43, lines 21-40).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter and Ducey to include separating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol, as taught by Jones, for the benefit of ensuring that the data being received is useable by the application, as data which does not comply with the protocol would require further processing.

Regarding claim 5, Richter, Ducey, and Jones disclose the method of claim 4 as applied above, but fail to disclose the protocol is UDP/IP.

Jones further teaches receiving and viewing data at personal computers (using such applications as a web browser or Java applet) which originated from a video network and is make available in UDP format over an IP network (col. 43, lines 30-39), wherein UDP/IP format is a more efficient means of handling and transporting data than the more common TCP/IP format, requiring less overhead bits, and IP is widely compatible with many applications, as any application which supports internet data recognizes IP.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter, Ducey, and Jones to include UDP/IP, as further taught by Jones, for the benefit of accessing the data using an efficient and widely compatible protocol.

Regarding claim 6, Richter, Ducey, and Jones disclose the method of claim 4, and further disclose appending headers to the broadcast data which does not conform to the protocol such that the data does conform to the protocol (an inherent step, as the process of converting the format of data to be transmit over a network or used by an application requiring a new protocol is to add new header data, Jones, col. 40, lines 64-67).

Regarding claim 23, Richter and Ducey disclose the method of claim 20, but fail to disclose differentiating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol and encapsulating the broadcast data the does not comply with the protocol with headers such that the broadcast data complies with the protocol.

In an analogous art, Jones teaches receiving data from multiple networks for use by multiple applications (col. 40, lines 52-67 and col. 41, lines 33-43), wherein data is intelligently converted as necessary (col. 40, lines 64-67), so when data which conforms to the protocol required by the network or application is received, no conversion takes place, but when the data does not conform to the necessary protocol, then the data is converted. This naturally means that received data is separated into objects or streams which comply with the necessary protocol from data which does not. The step of conversion inherently includes encapsulating the broadcast data by adding headers to the data such that it complies with the desired protocol (known as transcoding). This would allow users to receive a broad range services to be provided to users of many types of applications and devices (col. 43, lines 21-40).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter and Ducey to include separating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol and encapsulating the broadcast data that does not

comply with headers such that it does, as taught by Jones, for the benefit of ensuring that all received data is available to the applications.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richter and Ducey as applied to claim 1 above, and further in view of Mohammed (6,041,356).

Regarding claim 7, Richter and Ducey disclose the method of claim 1, but fail to disclose the common application interface is Winsock.

In an analogous art, Mohammed teaches accessing received data through Winsock (col. 5, lines 64 – col. 6 line 2), wherein Winsock is an application interface designed specifically for accessing data from an IP layer which has been received through an NDIS layer.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter and Ducey to include Winsock, as taught by Mohammed, for the benefit of accessing the broadcast data through a widely recognized and highly efficient application interface designed specifically for accessing data received through an NDIS layer (wherein utilizing NDIS for flexibility is established by Richter).

5. Claims 9, 10, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter and Ducey as applied to claims 1 and 20 above, and further in view of Stalker (US 2002/009186 A1).

Regarding claims 9 and 10, Richter and Ducey disclose the method of claim 1, but fail to disclose the common application interface is a presenter which formats and instance filters the broadcast data.

In an analogous art, Stalker teaches a presenter (fig. 2, data access system 30, paragraph 16, lines 1-4) which formats (using data source processors 42, paragraph 17) and filters (paragraph 21) incoming broadcast data, for the benefit of preparing the data for the requesting applications (paragraph 19) and processing only requested data (paragraph 21, lines 1-3).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter and Ducey to include a presenter which formats and instance filters received broadcast data, as taught by Stalker, for the benefit of properly preparing the received broadcast data for the requesting applications and more efficiently processing the incoming broadcast data by processing only the requested data.

Regarding claim 24, Richter and Ducey disclose the method of claim 20, but fail to disclose separating requested broadcast data from unrequested broadcast data.

In an analogous art, Stalker teaches filtering received broadcast data so that only requested broadcast data is processed (paragraph 21) in order to more efficiently process incoming data.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter and Ducey to include separating requested broadcast data from unrequested broadcast data, as taught by Stalker, for the benefit of more efficiently processing the received broadcast data.

6. Claims 11, 14, 16-19, 27, 29, 30, 35-38, and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter, Ducey, and Stalker.

Regarding claims 11, 27, and 50, Richter discloses a system (and computer program product) capable of receiving broadcast data (through ANDIS MAC drivers 50 and 66, fig. 4), a method for presenting broadcast data to an application (fig. 4, Applications 58), the method comprising the steps of:

Capturing the broadcast data by a broadcast data source (50 and 66 receive data, col. 4, lines 20-23);

Delivering the broadcast data to a miniport (as miniports are simply drivers which interface with an NDIS layer, represented here by NDIS Protocol Manager 56, and ANDIS-NDIS layer, and the ARCCI 68, in fig. 4); and

Transferring the broadcast data from the miniport to a common application interface (fig. 4, software layer comprising 54, 60, 62, 63, 64, and 65, col. 5 line 66 – col. 6 line 22).

Richter fails to disclose the broadcast data is embedded into television broadcasts and retrieving the broadcast data from the common application

interface by a presenter which prepares the broadcast data for presentation to the application.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method and computer program product disclosed by Richter to include embedding the broadcast data into television broadcasts as taught by Ducey, for the benefit of providing richer and more involving content in television broadcasts.

In an analogous art, Stalker teaches a presenter (fig. 2, data access system 30, paragraph 16, lines 1-4) which receives broadcast information and prepares (formats using data source processors 42, paragraph 17, and filters [paragraph 21]) the incoming broadcast data, for the benefit of making the data immediately accessible by the requesting applications (paragraph 19).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method and computer program product disclosed by Richter and Ducey to include a presenter which prepares received broadcast data, as taught by Stalker, for the benefit of making the received broadcast data immediately available for the requesting applications.

Regarding claim 14, Richter, Ducey, and Stalker disclose the method of claim 11, and further disclose the step of transferring the broadcasts data further comprises the steps of:

Transferring the broadcast data from the miniport to NDIS (as seen in fig. 4, where the data received through the MAC layer 50 and 66 is transferred to the protocol drivers which have been bound to each MAC through the protocol manager, col. 4, lines 55-60);

Transferring the broadcast data from NDIS to a protocol (each PD 54 is a protocol, col. 4, lines 38-45); and

Transferring the broadcast data from the protocol to the common application interface (where it is accessed by applications, col. 5 line 66 – col. 6 line 9).

Regarding claims 16 and 29, Richter, Ducey, and Stalker disclose the method of claim 11, and further disclose the common application interface is a [BDS] RawData interface [wherein BDS stands for Broadcast Data Service, the feature taught by Ducey] (the MAC Mode has a state for delivering raw or unformatted data, Richter, col. 7, lines 36-44, and as such, the application interface receiving data from the MAC driver would be a source of raw, unformatted data, col. 8, lines 65 – col. 9 line 2).

Regarding claims 17 and 30, Richter, Ducey, and Stalker disclose the method of claim 11, and further disclose the step of preparing the broadcast data further includes the presenter formats (Stalker, using data source processors 42, paragraph 17) and instance filters (Stalker, paragraph 21) the broadcast data.

Regarding claim 18, Richter, Ducey, and Stalker disclose the method of claim 11, and further disclose receiving a request from the application for the broadcast data (wherein the user of applications begins the process, Richter, col. 19, lines 54-59) through the miniport (because all communications between the receiving hardware and the NDIS layer pass through miniports).

Regarding claim 19, Richter, Ducey, and Stalker disclose the method of claim 11, and further disclose the enabling the broadcast data source (binding the MAC to a protocol or channel, Richter, col. 8, lines 34-44).

Regarding claims 35 and 46, Richter discloses a system (and computer program product) capable of receiving broadcast data (from LAN 46 and WAN found in fig. 4), a method for presenting the broadcast data to applications (fig. 4, applications 58), the method comprising retrieving broadcast data from a common application interface (Connection Management Interface API, col. 6, lines 4-9).

Richter fails to disclose receiving television broadcasts having broadcast data and calling by the applications a function, having a parameter, of a presenter interface, wherein the presenter interface provides the applications access to a broadcast data presenter, the broadcast data presenter being capable of retrieving and preparing broadcast data and executing the function by the presenter interface.

In an analogous art, Ducey teaches datacasting, a form of multimedia broadcasting which uses existing broadcasting infrastructures to transport digital information, both related and unrelated to the conventional programming, providing richer and more involving content in broadcast programming (pages 5-6, under the heading Multimedia broadcasting, paragraphs 1 and 2).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter to include receiving television broadcasts with broadcast data as taught by Ducey, for the benefit of providing richer and more involving content in television broadcasts.

In an analogous art, Stalker teaches a presenter (fig. 2, data access system 30, paragraph 16, lines 1-4) which receives broadcast information (paragraph 14, lines 1-5), wherein an application (fig. 4, application 34) calls a function (paragraph 16, lines 7-11) having parameters (paragraph 19, lines 6-10) of a presenter interface (fig. 4, interest manager 36), wherein the presenter interface provides the applications access to the presenter (paragraph 16), the presenter being capable of retrieving data from a source (or sources) of data

(paragraph 17) and prepares the data for the application (paragraph 17 and paragraph 18, lines 1-4), and executes the function by the presenter interface (paragraph 19, lines 11-13), providing applications with requested data without requiring each application to individually retrieve the broadcast data, streamlining the process and making it more efficient.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method and computer program product disclosed by Richter and Ducey to include calling by the applications a function, having a parameter, of a presenter interface, wherein the presenter interface provides the applications access to a broadcast data presenter, the broadcast data presenter being capable of retrieving broadcast data, prepared by a broadcast presenter, and executing the function by the presenter interface, as taught by Stalker, for the benefit of providing applications with requested data through a presenter interface, so that each application is not required to individually retrieve the broadcast data, streamlining the method and making it more efficient.

Regarding claims 36 and 47, Richter, Ducey, and Stalker disclose the method and computer program product of claims 35 and 46, and further disclose the function comprises SelectData (Stalker, paragraph 19, lines 1-3) and the parameters comprise DataType [module id] and VideoPort [source id] (paragraph 19, lines 6-10 [as the source ports receive broadcast data from television broadcasts, as taught by Ducey]).

Regarding claims 37 and 48, Richter, Ducey, and Stalker disclose the method and computer program product of claims 35 and 46, but fail to disclose the function comprises DeselectData and the parameter comprises PresenterHandler.

Examiner takes Official Notice that it is old and well known for user's of applications to cancel actions taken, such as a request for data, for instance, if the user of the application changes his or her mind concerning a particular request, it is a common feature of applications to cancel said request.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter, Ducey, and Stalker to include the function DeselectData and the parameter PresenterHandler, wherein the DeselectData function cancels the selection of previously selected data, and the PresenterHandler parameter identifies the data being deselected, for the benefit of providing to user's the option of canceling a request for a particular set of data if said user changes his or her mind.

Regarding claims 38 and 49, Richter, Ducey, and Stalker disclose the method and computer program product of claims 35 and 46, and further disclose the function comprises ReleaseData and the parameters comprise PresenterHandle and DeliveryLocation. This function call and parameters are inherently necessary, because a requesting application must not only identify

what data it wishes to receive, but must also identify itself so that the data, when received, is properly directed to the correct application.

7. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter, Ducey, and Stalker as applied to claim 11 above, and further in view of Jones.

Regarding claim 12, Richter, Ducey, and Stalker disclose the method of claim 11, but fail to disclose differentiating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol and encapsulating the broadcast data the does not comply with the protocol with headers such that the broadcast data complies with the protocol.

In an analogous art, Jones teaches receiving data from multiple networks for use by multiple applications (col. 40, lines 52-67 and col. 41, lines 33-43), wherein data is intelligently converted as necessary (col. 40, lines 64-67), so when data which conforms to the protocol required by the network or application is received, no conversion takes place, but when the data does not conform to the necessary protocol, then the data is converted. This naturally means that received data is separated into objects or streams which comply with the necessary protocol from data which does not. The step of conversion inherently includes encapsulating the broadcast data by adding headers to the data such that it complies with the desired protocol (known as transcoding). This would

allow users to receive a broad range services to be provided to users of many types of applications and devices (col. 43, lines 21-40).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter, Ducey, and Stalker to include separating broadcast data that complies with a protocol from broadcast data that does not comply with the protocol and encapsulating the broadcast data that does not comply with headers such that it does, as taught by Jones, for the benefit of ensuring that all received data is available to the applications.

Regarding claim 13, Richter, Ducey, Stalker, and Jones disclose the method of claim 12 as applied above, but fail to disclose the protocol is UDP/IP.

Jones further teaches receiving and viewing data at personal computers (using such applications as a web browser or Java applet) which originated from a video network and is make available in UDP format over an IP network (col. 43, lines 30-39), wherein UDP/IP format is a more efficient means of handling and transporting data than the more common TCP/IP format, requiring less overhead bits, and IP is widely compatible with many applications, as any application which supports internet data recognizes IP.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter, Ducey, Stalker, and Jones to include UDP/IP, as further taught by Jones, for the benefit of accessing the data using an efficient and widely compatible protocol.

8. Claims 15 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter, Ducey, and Stalker as applied to claims 11 and 27 above, and further in view of Mohammed.

Regarding claims 15 and 28, Richter, Ducey, and Stalker disclose the method of claims 11 and 27, but fail to disclose the common application interface is Winsock.

In an analogous art, Mohammed teaches accessing received data through Winsock (col. 5, lines 64 – col. 6 line 2), wherein Winsock is an application interface designed specifically for accessing data from an IP layer which has been received through an NDIS layer.

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Richter, Ducey, and Stalker to include Winsock, as taught by Mohammed, for the benefit of accessing the broadcast data through a widely recognized and highly efficient application interface designed specifically for accessing data received through an NDIS layer (wherein utilizing NDIS for flexibility is established by Richter).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bergler (5,572,675) who teaches an integrated service, protocol

independent API, and Mohammed et al. (6,157,965) who teaches a method for

interfacing applications to network driver interface device drivers.

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____.
(Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703)_____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D Saltarelli whose telephone number is (703) 305-8660. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (703) 305-4038. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS

VIVEK SRIVASTAVA
PRIMARY EXAMINER